INSITE
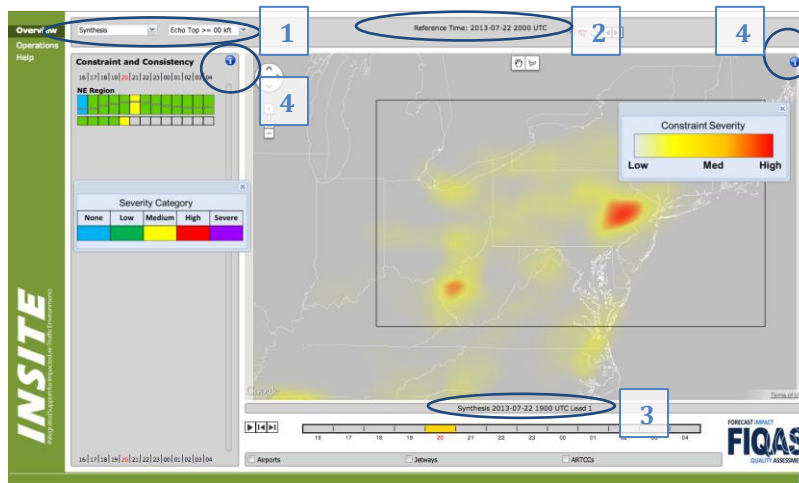## INtegrated Support for Impacted air-Traffic Environments

The web-based application INSITE, INtegrated Support for Impacted air-Traffic Environments, was developed to support the Operational Bridging (OB) element of the Collaborative Decision Making Weather Evaluation Team. The key output of OB is a collaborated, event-driven forecast product known as the Aviation Weather Statement (AWS). INSITE was designed to assist in the creation of the AWS.

Overview Tab – Products for Display

On the overview tab, users can select to view:

- Product Type: Users can select raw or translated observations, forecasts from CIWS, CCFP, HRRR, LAMP, and SREF, as well as a Synthesis of the translated forecasts (1). Also selectable is the echo top above which translated products are valid.
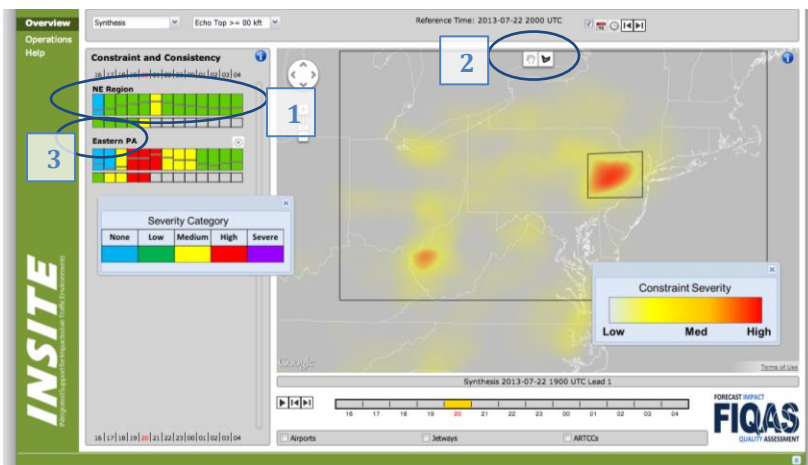
For all products viewed:
- The Reference time (2) is shown at the top of the page. This is the effective current time.
- The figure label (3) shows the initialization time of the product, and lead.
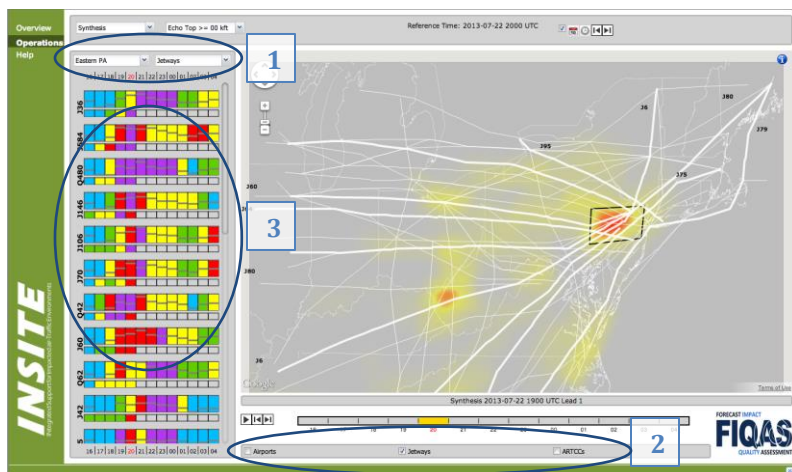- Legends for products are available by hovering over the **i** (4) buttons.

Overview Tab – Polygon Creation

On the overview tab:
- Information is shown in a constraint and confidence/consistency "CC" bar chart (1) for the default NE Region (outlined in black) or user-defined polygons.
  - Constraint is scaled blue-green-yellow-red-purple, blue being no constraint, purple the greatest constraint.
  - Confidence/consistency of a forecast is shown in black/grey bars – high confidence being a bar near the top of the color.
- Users can create a polygon of their choosing by clicking on the polygon icon (2). Simply click on the corners of your polygon to draw.
- Created polygons are given a default name. Users can edit the name by clicking on it (3), which makes the field editable.

Operations Tab – NAS Element Interrogation

On the overview and operations tabs:
- Information is available for each forecast/observation product, and echo top (1).
- Overlays (2) are available for easy georeferencing of Core-30 airports, ARTCC boundaries, and high-traffic J and Q airways (jetway overlay shown in image).
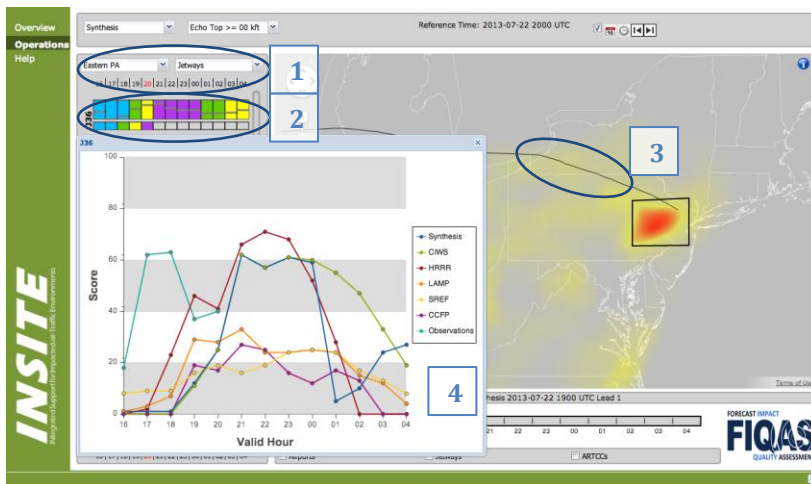
On the operations tab:
- For Jetway or ARTCC selections, CC-bars for the NAS elements (3) are listed in order of impact.

Overview/Operations Tabs - Confidence and Constraint

On the operations tab, users can interrogate a polygon of their choosing:
- The user can select the polygon to interrogate as well as the NAS elements to display (ARTCC or Jetway) (1).
- Hovering over the CC-bar (2) for a specific NAS element (in this case, J36) highlights that element on the display (3).
- Clicking on that element (2) brings up a bar chart (4), showing the constraint predicted for the section of jetway intersecting the polygon for all the observations as well as for all forecasts.

http://esrl.noaa.gov/fiqas/tech/impact/insite/